

Contractor Service Tips



Compressor Overheat

Overheat is has been a major cause of compressor failures. Temperatures in the compressor head and cylinder become so hot that the oil thins and loses its ability to lubricate. This may cause rings, pistons, and cylinders to wear resulting in blow by, leaking valves and metal debris in the oil. It can also cause the stator to ground due to a spot burn.

Cylinder temperatures exceeding 300°F will begin the breakdown of oil and at 350°F oil will be vaporized. To measure cylinder temperature, place your temperature gauge no more than six inches out on the discharge line from the compressor. For most applications the temperature should be below 225°F. This factors in a 50-75 degree temperature drop from the cylinder to the measured point.

To correct for overheat:

1. Correct abnormally low load conditions
2. Correct high discharge and low suction pressure conditions
3. Insulate suction lines, clean dirty condensers
4. Provide proper compressor cooling
5. Check low pressure control settings

Pressure controls can help to identify or remedy system problems.